**Supplementary material**

Linda Pipkorn, Emma Tivesten, Carol Flannagan, and Marco Dozza

This document includes supplementary material for the paper *Driver response to take-over requests in real traffic.* For detailed information about the modelling procedure, the model output (MCMC traces) and model validation we refer the reader to: <https://github.com/ruvigroup/Paper_IEEE_HMS_2023_Pipkorn-et-al>. Fig. 1 displays the drivers’ response processes for all participants. A subset of this figure was included in the paper.

**Fig. 1.** The drivers’ response processes to each of the four TORs, including the response times for: first glance to instrument cluster, first glance forward, hands on wheel, foot on accelerator pedal, foot on brake pedal, and automation deactivation. If the gaze direction was towards an NDRT item at the time of the TOR, a filled black half-circle can be seen to the left of that driver.

